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Economic White Paper: Changes Needed To Boost Living Standard

A report issued by Japan's Economic Planning Agency August 18 urged a series of reforms to promote harmonious relations with the country's trading partners and at the same time improve the standard of living. The government's annual economic report proposed better market access, agricultural reforms, a reduced work week and increased investment in social infrastructure, such as parks and roads. Moreover, the EPA said a more efficient distribution system is necessary to reduce consumer prices and boost domestic demand.

The 4.1 percent real growth in domestic demand in FY 1986, the fastest in seven years, reflects the progress that has been made to restructure the economy to domestic demand-led growth (see Table). The negative impact of the external sector, however, slowed growth to an inflation-adjusted 2.6 percent, the lowest since fiscal 1974. The white paper reported that the economy, which peaked in June 1985 before being hit by the high yen, began to recover in early 1987.

Components of Japan's Real Economic Growth

	Total Rate	Domestic Component	External Component	Current Account Surplus*
FY 1970	7.6%	9.0%	-1.4%	$2.3
FY 1971	5.0	4.1	0.9	6.3
FY 1972	9.2	10.6	-1.4	6.2
FY 1973	4.5	7.5	-3.0	-3.9
FY 1974	-0.4	-2.9	2.5	-2.3
FY 1975	3.9	2.4	1.4	0.1
FY 1976	4.6	3.8	0.8	4.7
FY 1977	5.3	4.5	0.8	14.0
FY 1978	5.2	7.1	-1.9	11.9
FY 1979	5.3	5.1	0.2	-13.9
FY 1980	4.0	1.0	3.0	-7.0
FY 1981	3.3	2.1	1.2	5.9
FY 1982	3.2	2.7	0.5	9.1
FY 1983	3.7	2.1	1.5	24.2
FY 1984	5.1	3.8	1.2	37.0
FY 1985	4.3	3.6	0.7	55.0
FY 1986	2.6	4.1	-1.5	94.1

*In billions of dollars.

Source: Economic Planning Agency

Declining employment in the manufacturing sector boosted the unemployment rate to a record 3 percent in FY 1986 and the study warned that the surge in direct foreign investment by Japanese firms threatens to further increase it. Another major problem -- the rise in land prices -- is blamed in part on the large number of foreign banks and securities firms opening offices in Tokyo as a result of financial market opening steps. Although it is only 4 percent as large as the United States in terms of geographic size, the report said Japan's land area is valued at $6.9 trillion, compared to this country's $3.3 trillion. The report called on government authorities to intervene in real estate transactions to slow the rise in land prices.

The strong yen helped boost import volume by 14.1 percent in FY 1986, while exports fell 1.3 percent. Particularly important was the sharp 34.7 percent rise in the value of manufactured imports that brought its share to a record 44.1 percent of purchases from abroad. Still, the EPA noted that the $94.1 billion current account surplus recorded in FY 1986 was equivalent to 4.5 percent of Japan's gross national product, the highest figure recorded by an industrial country in the postwar era. Japan's surplus, however, appears to have peaked in early 1987; a larger deficit in services in the April-June 1987 quarter reduced the current account surplus below its year-earlier level for the first time in 18 quarters (see JEI Report No. 30B, August 7, 1987).

EPA director general Tetsuo Kondo also announced that his agency will issue a progress report by mid-October on the implementation of the Maekawa Report. The commission's original study in April 1986 was supplemented by a follow-up report last April (see JEI Report No. 17B, May 1, 1987).

Randall S. Jones

Foreign Minister Kuranari Visits South Asia

On August 16 Japan's Foreign Minister Tadashi Kuranari completed an eight-day tour of India, Sri Lanka and Bangladesh. The visit, the first since former foreign minister Iichiro Hatoyama's in 1977, was an effort to promote economic and political relations between Japan and South Asia. Not surprisingly, the discussions focused on the economic needs of the three countries, especially the possibility of expanded economic assistance from Tokyo.

Japan has been generous to the region (see Table 1). In 1985, for example, Bangladesh and Sri Lanka were among the top ten recipients of Tokyo's official development assistance, ranking seventh and ninth, respectively. (Pakistan also receives a sizable share of Japanese aid -- some $93 million in 1985 -- putting it in eighth place.) Approximately 10 percent of total ODA went to South Asia -- less than Southeast Asia or Northeast Asia's shares, and roughly equal to the amount received by non-Asian regions.

Table 1: Japan's Aid to India, Sri Lanka and Bangladesh, 1981-85

(in millions of dollars)

	1981	1982	1983	1984	1985
India					
Grants	$20.8	$17.0	$13.4	$17.6	$14.1
Loans	-16.8	24.1	116.1	4.0	7.8
Total	4.0	41.1	129.5	21.6	21.9
Sri Lanka					
Grants	31.6	27.8	35.3	35.2	41.1
Loans	17.4	33.8	37.8	28.5	42.7
Total	49.1	61.6	73.1	63.8	83.7
Bangladesh					
Grants	55.1	48.7	42.8	48.2	62.2
Loans	89.9	167.1	61.4	75.1	59.3
Total	145.0	215.8	104.2	123.3	121.5

Source: Ministry of Foreign Affairs

Mr. Kuranari pledged a Y68.5 billion ($456.7 million at Y150=$1.00) loan to India, the largest amount Japan has ever lent to that country. Discussions were also held about the possibility of a Y19.3 billion ($128.7 million) package to Sri Lanka as well as an emergency aid package to relieve victims of recent floods in Bangladesh.

South Asian leaders also urged Tokyo to correct Japan's persistent trade surplus with the region (see Table 2) by lowering tariffs on imports of tea and other agricultural products. Officials are also interested in more direct investment, although Mr. Kuranari stressed that an improvement in the investment climate would have to come first. He referred specifically to the upheaval surrounding the Tamil separatist movement in Sri Lanka, noting approvingly the recent India-Sri Lanka accord that seeks to end ethnic hostilities.

Table 2: Japan's Trade With India, Sri Lanka and Bangladesh, 1982-86

(in millions of dollars)

	1982	1983	1984	1985	1986
India					
Exports	$1,408.3	$1,430.7	$1,167.8	$1,596.4	$2,099.4
Imports	1,122.1	1,130.8	1,132.4	1,188.6	1,297.0
Trade Balance	286.2	299.9	35.4	407.8	802.4
Sri Lanka					
Exports	226.3	290.1	254.1	270.7	288.7
Imports	70.9	69.0	79.7	78.6	89.3
Trade Balance	155.4	221.1	174.4	192.1	199.4
Bangladesh					
Exports	210.7	192.0	243.5	311.1	445.2
Imports	56.2	64.7	78.3	84.4	82.7
Trade Balance	154.5	127.3	165.2	226.7	362.5

Source: Japan Tariff Association, The Summary Report: Trade of Japan

The foreign minister pledged to strengthen Tokyo's contact with the South Asian Association for Regional Cooperation, a seven-member group comprised of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and the Maldives. Although Japan has readily acknowledged that its leadership role in Asia lies in promoting economic stability and meeting development goals, the primary focus has in the past been aimed at those countries closest to home: Northeast Asian countries and members of the Association of Southeast Asian Nations. Nonetheless, Mr. Kuranari's visit to South Asia was a signal that Tokyo has no intention of leaving this part of the continent out of the picture.

Eileen Marie Doherty

DOD Releases Final Electro-Optic Report

The Department of Defense recently released its final report on electro-optics and millimeter wave technology in Japan, concluding that "a significant number of Japanese industries have ongoing R&D programs in [these fields] that are of interest to, and offer potential for, DOD programs." The report categorized these advances in four areas: information processing (fiber optics, television displays, communications and computers); basic microelectronics (gallium arsenide devices and optoelectronics); space applications (ring laser and fiber optic gyros); and aeronautical applications (radar altimeters, accelerometers, and various display and control technologies). The task force completing the report said that Japanese firms are within one or two years of commercializing magnetic optical disk technology for mass storage applications and are "comparable to or ahead of U.S. work" on gallium arsenide devices. Researchers in Japan are said to be taking the lead in developing technologies for various cathode-ray tubes, plasma display panels and liquid crystal displays.

The report follows a shorter assessment released in May 1985 that spurred DOD to investigate the capabilities of 13 Japanese facilities in 24 technologies for the current study. The DOD team was headed by Dr. John MacCallum and included representatives of the Naval Research Laboratory, the Army Night Vision Electro-Optics Center, the Defense Advanced Research Project Agency, the Air Force Wright Aeronautical Laboratory and B-K Dynamics, Inc.

One of the significant themes in both reports is the ability of Japanese companies to commercialize new technologies more rapidly than is customary in the United States. Japanese firms, the task force concluded, are driven primarily by commercial considerations in their R&D, thus explaining their ability to introduce products more rapidly in many cases than their competitors.

On a policy level, the commercial/competitive pressures in Japan also imply a need for extensive government-to-government cooperation in order to facilitate technology transfers to the United States for defense work. While the MacCallum task force recognizes that government interaction will be needed to overcome reservations about the competitive implications of such transfers, questions remain regarding DOD's policy toward foreign-sourced inputs.

A study completed by the Defense Science Board earlier this year on semiconductors suggested a need for reducing this country's dependence on foreign suppliers (see JEI Report No. 7B, February 20, 1987). While that report did not represent DOD policy, it appears that a number of officials share these perceptions. This has encouraged doubts within the Japanese business community about U.S. intentions to acquire Japanese technologies. One might argue that since the most recent report was concluded under the auspices of DOD's research and advanced technology office it must reflect department attitudes. At the very least, it is hoped that the report will help facilitate transfers by identifying areas of interest and providing American industry with more in-depth information concerning Japanese companies and capabilities.

DOD is involved in another study of Japanese capabilities, this one on production and manufacturing techniques. Dr. Clinton W. Kelly, a member of DARPA's technology assessment team for manufacturing technology, who briefed the Senate Armed Services subcommittee on defense, industry and technology on July 23, said that "the Japanese are able to rapidly transition advanced manufacturing technology into the production environment; Japanese companies are, by nature, highly efficient just to survive a brutal domestic competitive environment; and obsession with product quality is the cornerstone for long-term market share and economic growth." Dr. Kelly summarily declared that "Japan's competitors are being outhustled," noting that a number of factors -- not simply hard-to-penetrate markets -- explain this phenomenon.

Following a tour of Japanese facilities in January 1987, the technology team identified the following elements as critical to Japan's success:

- Rapid commercialization - Severe competitive pressures, fostered in part by government policies, force Japanese companies to introduce new products into the market or risk failure. Sophisticated design approaches calling for automated assembly, design for "manufacturability," or concurrent design accelerate product development. Finally, Japanese manufacturers have mastered the KISS principle -- "keep it simple, stupid." Components are kept to a minimum and the design is as simple as possible.

• Nature of manufacturing - Manufacturing processes are viewed as a strategic factor contributing to Japan's competitive advantage. They account for as much as 40 percent of a company's R&D budget compared to about 10 percent for American companies (see Table). Interestingly, the team has concluded tentatively that automation -- while extensive -- is used primarily for simple tasks, freeing human resources for the more complicated aspects of the manufacturing process. This differs somewhat from the popular concept of totally automated Japanese factories with endless rows of robots performing a range of highly complex tasks.

Manufacturing Comparisons

Category	Japan	United States
Indirect vs. direct labor	4:1	8:1
Nonconformance/rework (electronics industry)	0.5-1%	8-10%
Working stock/inventory on hand	Up to 2 months	Up to 9 months
Robots utilized (welding, assembly, materials handling)	40,000+	10,000+
Time between orders and shipments (machine tool industry)	1-2 months	5-6 months
Personnel turnover (percent of enterprise population)	1%	10-12%
Average work hours per employee year	2,152	1,898
Average age of plant and equipment (total industrial base)	10 years	17 years
Private investment in plant and equipment as share of GNP	17%	10.2%
Electronics sales to other country	$23.9 billion	$3.5 billion
Number of manufacturing jobs (1986)	15 million	20 million

Source: Department of Defense, Technology Assessment Team for Manufacturing Technology

• Human resources - Characteristics constituting "pillars of the Japanese industrial community" include a "significant commitment to company-sponsored education and training, and company philosophy."

• Quality control - The emphasis on assuring quality in all phases of the manufacturing process appears throughout research, sales, planning, training and production facilities. This contrasts with the American attitude of assigning responsibility for assuring a product's quality to a single department. The Japanese, Dr. Kelly concluded, "sincerely believe that their manufacturing excellence derives from quality."

Michael W. Chinworth

MOSS Talks On Automotive Parts End

Duplicating the success of the inaugural MOSS (market-oriented, sector-selective) negotiations on telecommunications equipment and services, medical

equipment and pharmaceuticals, electronics products, and wood and paper products would have been tough no matter what products were targeted for the second round of in-depth talks. But the selection of automotive parts stacked the odds against a repeat performance. As Under Secretary of Commerce for International Trade Bruce Smart readily acknowledged during the initial August 1986 meeting on automotive parts, the close ties between Japanese motor vehicle manufacturers and their traditional suppliers, not formal trade barriers, are the main reason American companies have trouble selling production components to Japanese car and truck plants at home and abroad and gaining access to the worldwide aftermarket for Japanese vehicles.

Even though Commerce officials could put check marks next to each of the five items on their agenda for the parts discussions by the time the talks ended August 18, they would be the first to concede that the results of the negotiations did not have the domestic political punch of the 1985 MOSS sessions. Mr. Smart told a Tokyo press briefing that the main achievement of his three meetings with Makoto Kuroda, International Trade and Industry vice minister for international affairs, and seven rounds of working-level discussions was the new awareness of Japan's motor vehicle makers and U.S. parts producers alike that they must change the way they do business. Car and truck builders recognize that they can no longer politically afford to source the vast majority of their parts requirements from traditional suppliers, the chief American negotiator said, while U.S. companies have learned that they must be able to equal their Japanese competitors in terms of quality, price and delivery to win contracts from Japan's vehicle industry.

The most tangible result of the year-long talks was the establishment of a system to monitor purchases of American-made parts, accessories and materials by Japanese automotive manufacturers and their U.S. subsidiaries over the five-year period starting in April 1987. This was one of Washington's key objectives for the negotiations, in part because the two countries have never agreed on the value of U.S. parts bought by Japan's motor vehicle industry but also because domestic suppliers of both original equipment and replacement parts believe that the publication of data on U.S. sourcing will compel Japanese makers to increase their purchases from American vendors.

But U.S. trade negotiators did not get everything the domestic industry wanted in terms of a monitoring system. Instead of quarterly reports that break out purchases from the growing list of Japanese parts producers operating in this country (see JEI Report No. 11A, March 20, 1987), the Japan Automobile Manufacturers Association will only release semiannual figures that combine purchases from the "transplants" with procurement from companies headquartered in the United States. A single number, American suppliers worry, could easily hide a continuing low volume of purchases from U.S. vendors even as the total figure rises from FY 1986's $2.5 billion level (see Table).

In addition to the monitoring system, JAMA will keep track of the number of "purchasing relationships" Japanese car and truck builders or their American affiliates establish with U.S. parts suppliers each year through April 1991. The basis of comparison will be the early April 1987 total of 807. The trade association will also periodically update the list of specific purchasing department contacts that has already been distributed to U.S. parts companies through the Commerce Department.

Purchases of American-Made Parts by Japanese Automotive Makers and Their U.S. Subsidiaries, FY 1985 and FY 1986

(in thousands of dollars*)

	FY 1985	FY 1986
Engine Parts	$205,830	$238,507
Chassis and Drivetrain Parts	187,852	205,542
Body Parts	396,367	775,955
Electrical and Electronic Parts	684,518	916,230
Accessories	76,046	106,542
Materials	175,883	246,659
Total	1,726,496	2,489,435

*Japanese imports were converted into dollars at the following average fiscal year exchange rates: FY 1985, Y221 and FY 1986, Y160.

Source: Japan Automobile Manufacturers Association

For its part, the Japanese government said it would continue to cooperate with industry in staging seminars and trade shows and to work with Washington in resolving problems that crop up in the automotive parts trade. Touching on a related matter, the Japanese side noted in the final report on the negotiations that the government had already taken steps to insure that the Ministry of Transportation's periodic vehicle inspection program does not discriminate against cars and trucks equipped with foreign parts.

Tokyo and Washington said they would hold follow-up meetings on parts issues, but this pledge did nothing to pacify leaders of the 26-member congressional task force on automotive parts, top United Auto Workers union officials and U.S. industry executives angry that American negotiators had not extracted specific commitments from Japanese motor vehicle manufacturers to expand their purchases of American-made parts. However politically attractive such commitments might be, they were never on Commerce's agenda for the talks because of administration opposition to government-enforced purchasing quotas or goals. But even without specific commitments, American suppliers will win more Japanese business; the run-up in the yen's value and the expanding ranks of domestic makers able to meet Japanese requirements guarantee that outcome.

Susan MacKnight

Notes

Exchange Rate Update - The yen rose for the sixth consecutive trading session on August 24, closing at Y142.65=$1.00, the highest since June 10. The yen has risen 6.8 percent against the dollar since the August 14 announcement of a larger-than-expected U.S. June trade deficit of $15.7 billion. Traders also attributed the dollar's weakness to the downward revision in the second

quarter U.S. gross national product and Japanese Finance Minister Kiichi Miyazawa's comments that the dollar's latest fall would not seriously affect Japan's economy.

Many analysts were surprised by the small scale of central bank intervention in exchange markets during the week of August 14-21. There was speculation that the currency ranges the major countries had agreed to defend in the February meeting in Paris were no longer viable in light of the failure of the U.S. trade deficit to show much signs of improvement. On August 24, though, the Bank of Japan purchased an estimated $200 to $400 million to slow the fall of the dollar. In addition, central bank sources said they will continue to maintain an easy monetary policy, which helps stabilize the yen. In July Japan's money supply (M_2+CDs) grew at a double-digit rate from year-earlier levels for the third consecutive month.

World Bank Borrowing - As part of Tokyo's three-year plan to recycle $20 billion to the developing countries (see JEI Report No. 21B, June 5, 1987), a syndicate of 12 nationwide commercial banks led by Fuji Bank, Ltd. agreed August 10 to lend the World Bank Y20 billion ($133.3 million at Y150=$1.00). A week later the bank arranged Y15 billion ($100 million) in financing from a group of 49 regional banks led by the Bank of Yokohama, Ltd. Both loans are for seven years and carry an interest rate of 5.2 percent. The World Bank has not borrowed from Japanese banks for nearly three years.

Top Japanese Defense Contractors - According to the Japan Defense Agency, Mitsubishi Heavy Industries, Ltd. solidified its position as the nation's top defense contractor in FY 1986, garnering Y291.4 billion ($1.9 billion at Y150=$1.00) or 24.3 percent of JDA's total Y1,199.4 billion ($8 billion) procurement (see Table). Altogether, the top ten contractors won Y786.8 billion ($5.3 billion) in contracts, virtually unchanged at 65.6 percent of total awards. Moreover, with the exception of Mitsubishi Corp. replacing Sumitomo Heavy Industries, Ltd. on the list, the top ten contractors stayed the same.

Aircraft purchases and maintenance costs accounted for 26.9 percent of JDA's equipment outlays in FY 1986. This share is expected to remain about the same during the current fiscal year when procurement is anticipated to reach Y1,326 billion ($8.8 billion).

MHI's dominant role in defense production partly reflects the fact that it is the prime contractor for JDA's F-15. It is also an indication of the success of the company's long-term marketing strategy, which in recent years has emphasized defense sales. This focus, coupled with the significant role of aircraft procurement in JDA's overall budget, explains MHI's attachment to the proposed plan to develop domestically a new generation of fighter support aircraft. A decision on the FSX program could be announced as early as September, although with sentiment in both Japan and the United States running so strongly, another postponement might be inevitable. JDA is attempting to find a solution that will satisfy domestic manufacturers and U.S. government officials, who would like Tokyo to import an American-made plane, in part to alleviate trade tensions.

Top Japanese Defense Contractors, FY 1985 and FY 1986

(in billions of yen)

FY 1985	Amount	Percent of Total
1. Mitsubishi Heavy Industries, Ltd.	Y242.0	21.8%
2. Kawasaki Heavy Industries, Ltd.	123.4	10.7
3. Mitsubishi Electric Corp.	104.7	9.2
4. Toshiba Corp.	73.3	6.4
5. Ishikawajima-Harima Heavy Industries Co., Ltd.	69.4	6.0
6. NEC Corp.	40.5	3.5
7. Japan Steel Works, Ltd.	28.6	2.5
8. Sumitomo Heavy Industries, Ltd.	22.4	1.9
9. Hitachi Zosen Corp.	21.6	1.9
10. Fuji Heavy Industries, Ltd.	17.7	1.5
Total	743.6	65.2
FY 1986		
1. Mitsubishi Heavy Industries, Ltd.	291.4	24.3
2. Kawasaki Heavy Industries, Ltd.	144.8	12.1
3. Mitsubishi Electric Corp.	81.3	6.8
4. Ishikawajima-Harima Heavy Industries Co., Ltd.	77.8	6.5
5. Toshiba Corp.	67.4	5.6
6. NEC Corp.	48.5	4.0
7. Japan Steel Works, Ltd.	22.2	1.9
8. Fuji Heavy Industries, Ltd.	18.2	1.5
9. Hitachi Zosen Corp.	18.2	1.5
10. Mitsubishi Corp.	17.0	1.4
Total	786.8	65.6

Sources: Jieitai Sobi Nenkan, 1986 and 1987; Wing, June 3, 1987.

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The views expressed in this report are those of the authors and do not necessarily represent those of the Japan Economic Institue.